

DERWENT-ACC-NO: 2000-238414  
DERWENT-WEEK: 200122  
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TITLE: Heat-bonded nonwoven insulation material is composed of a mixture of bicomponent bonding fibers and other fiber types for stability under heat

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PRIORITY-DATA: 1998DE-1040050 (September 2, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
DE 19840050 A1	March 9, 2000	N/A
008	D04H 001/54	
DE 19840050 C2	April 19, 2001	N/A
000	D04H 001/54	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
DE 19840050A1	N/A	1998DE-1040050
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DE 19840050C2	N/A	1998DE-1040050
September 2, 1998		

INT-CL (IPC): D04H001/54

ABSTRACTED-PUB-NO: DE 19840050A

BASIC-ABSTRACT: NOVELTY - The heat-bonded nonwoven material is composed of a fiber mixture with bonding fiber components. The bonding fibers are bicomponent types with a core of polyethylene glycol terephthalate and a mantle of copolyester. The mantle is preferably of a crystalline copolyester.

DETAILED DESCRIPTION - The melting point of the bicomponent fiber mantle is set at 145-205 deg. C using differential scanning calometry

(DSC). The fiber mixture for the nonwoven is composed of 5-95% of bonding fibers and 95-5% of other fiber types. The other fiber types contain up to 50% of mantle-core bicomponent fibers, where the core component has a melting point which is at least 20 deg. C higher than the mantle component, with an amorphous mantle character with a melting point at least 10 deg. C lower than the melting point of the mantles of the bonding fibers. The heat-bonded nonwoven has a thickness of 5-100 mm, with a density of 0.005-0.25 g/cm<sup>3</sup>. The bonding fibers have a thickness of 1.7-17.0 dtex.

An INDEPENDENT CLAIM is included for a layered material (4), where the base material (6) is a mixture of bonding fibers and other fiber types. Preferred Features: The laminated covering layers (5,7) have additives for decoration, stabilizing or other functional uses.

USE - The nonwoven is for use as acoustic insulation and/or as a cladding with shape stability for land/air/water vehicles such as a cladding for the engine compartment, for machinery construction or building construction applications.

ADVANTAGE - The material has stability when subjected to heat, meeting the current technological needs of vehicle manufacturers.

DESCRIPTION OF DRAWING(S) - The drawing shows a cross section through the layered nonwoven material.

Layered nonwoven material 4

Outer layers 5,7

Nonwoven base core 6

CHOSEN-DRAWING: Dwg.3/3

TITLE-TERMS:

HEAT BOND NONWOVEN INSULATE MATERIAL COMPOSE MIXTURE BOND  
TYPE STABILISED HEAT

DERWENT-CLASS: A23 A95 F04

CPI-CODES: A05-E01D; A05-E04E; A12-R06; A12-S05B; A12-S05G;  
F02-C01B1; F04-E06;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

018 ; R00822 G1025 G0997 D01 D11 D10 D50 D82 F28 F26 ;  
H0011\*R ;  
P0884 P1978 P0839 H0293 F41 D01 D11 D10 D19 D18 D31 D50  
D63 D90  
E21 E00 ; S9999 S1127 S1116 S1105 S1070 ; S9999 S1183  
S1161 S1070

Polymer Index [1.2]

018 ; ND01 ; ND10 ; Q9999 Q6622 Q6611 ; Q9999 Q9289  
Q9212 ; Q9999  
Q9223 Q9212 ; Q9999 Q9234 Q9212 ; Q9999 Q9290 Q9212 ;  
Q9999 Q6826\*R  
; B9999 B4682 B4568 ; B9999 B5607 B5572 ; B9999 B5254  
B5243 B4740

Polymer Index [2.1]

018 ; P0839\*R F41 D01 D63 ; S9999 S1138 S1116 S1105  
S1070 ; S9999  
S1183 S1161 S1070

Polymer Index [2.2]

018 ; ND01 ; ND10 ; Q9999 Q6622 Q6611 ; Q9999 Q9289  
Q9212 ; Q9999  
Q9223 Q9212 ; Q9999 Q9234 Q9212 ; Q9999 Q9290 Q9212 ;  
Q9999 Q6826\*R  
; B9999 B4682 B4568 ; B9999 B5607 B5572 ; B9999 B5254  
B5243 B4740

Polymer Index [2.3]

018 ; B9999 B4795 B4773 B4740

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